

APPLICATION NO.: 10/773,084

ATTY. DOCKET NO.: C0989.70049US01

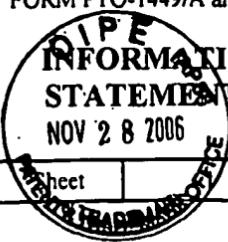
FILING DATE: February 5, 2004

CONFIRMATION NO.: 3297

APPLICANT: Zhao et al.

GROUP ART UNIT: 1634

EXAMINER: Ethan C. Whisenant


 INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

NOV 28 2006

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U.S. PATENT DOCUMENTS

Examiner's Initials #	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication or Issue of Cited Document MM-DD-YYYY
		Number	Kind Code		
EW		4,793,705		Shera	12-27-1988
		5,422,271		Chen et al.	06-06-1995
		6,225,067	B1	Rogers	05-01-2001
		6,287,765	B1	Cubieciotti	09-11-2001
		6,344,319	B1	Bensimmon et al.	02-05-2002
		6,383,740	B2	Collins	05-07-2002
		2003-0129611	A1	Bao et al.	07-10-2003
		2004-0175732	A1	Rana et al.	09-09-2004
		2005-0074788	A1	Dahlberg et al.	04-07-2005
		2006-0134679	A1	Larson et al.	06-22-2006
		2006-0160209	A1	Larson et al.	07-20-2006
		2006-0160231	A1	Nadel et al.	07-20-2006
		2006-0204978	A1	Nilsen et al.	09-14-2006
		2006-0228747	A1	Fuchs et al.	10-12-2006

FOREIGN PATENT DOCUMENTS

Examiner's Initials #	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Translation (Y/N)
		Office/ Country	Number	Kind Code			
	*	WO	01/90418	A1	The Regents of the University of	11-29-2001	
	*	WO	03/000933	A1	Georgia Tech Research Corporation	01-03-2003	

OTHER ART — NON PATENT LITERATURE DOCUMENTS

Examiner's Initials #	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Translation (Y/N)
	*	AMBROSE et al., Application of single molecule detection to DNA sequencing and sizing, Ber. Bunsenges. Phys. Chem. 1993; 97:1535-1542.	
	*	BARAD et al., MicroRNA expression detected by oligonucleotide microarrays: System establishment and expression profiling in human tissues. Genome Res. 2004 Dec; 14(12):2486-94.	
↓	*	BÖHMER, Cell division analysis using bromodeoxyuridine-induced suppression of Hoechst 33258 fluorescence. Methods Cell Biol. 1990;33:173-84.	

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/Ethan Whisenant/

DATE CONSIDERED:

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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EW	*	CAPLIN et al., LightCycler hybridization probes: the most direct way to monitor PCR amplification for quantification and mutation detection. Biochemica. 1999;1:5-8.	
	*	DITTRICH et al., Sorting of cells and single particles in microstructures. Biophysical Journal. 2002 Jan; 82(1):43a. Abstract only.	
	*	FAN et al., Electrochemical detection of single molecules. Science. 1995, Feb 10; 267:871-4.	
	*	GOODWIN et al., Spatial dependence of the optical collection efficiency in flow cytometry. Cytometry. 1995 Oct 1;21(2):133-44.	
	*	HAAB et al., Single molecule fluorescence burst detection of DNA fragments separated by capillary electrophoresis. Anal. Chem. 1995 SEP 15; 67(18):3253-60. Abstract Only.	
	*	HEINZE et al., Two-photon fluorescence coincidence analysis: rapid measurements of enzyme kinetics. Biophys J. 2002 Sep;83(3):1671-81.	
	*	HUANG et al., DNA sequencing using capillary array electrophoresis. Anal Chem. 1992 Sep 15;64(18):2149-54.	
	*	JU et al., Cassette labeling for facile construction of energy transfer fluorescent primers. Nucleic Acids Res. 1996 Mar 15;24(6):1144-8.	
	*	KINJO et al., Ultrasensitive hybridization analysis using fluorescence correlation spectroscopy. Nucleic Acids Res. 1995 May 25;23(10):1795-9.	
	*	KLAR et al., Fluorescence microscopy with diffraction resolution barrier broken by stimulated emission. PNAS. 2000 July 18; 97(15):8206-10.	
	*	LACOSTE et al., Ultrahigh-resolution multicolor colocalization of single fluorescent probes. Proc Natl Acad Sci U S A. 2000 Aug 15;97(17):9461-6.	
	*	LEE et al., A fluorometric assay for DNA cleavage reactions characterized with BamHI restriction endonuclease. Anal Biochem. 1994 Aug 1;220(2):377-83.	
	*	LEE et al., Laser-induced fluorescence detection of a single molecule in a capillary. Anal Chem. 1994 Dec 1;66(23):4142-9.	
	*	MATAYOSHI et al., Novel fluorogenic substrates for assaying retroviral proteases by resonance energy transfer. Science. 1990 Feb 23;247(4945):954-8.	
	*	MERGNY et al., Fluorescence energy transfer as a probe for nucleic acid structures and sequences. Nucleic Acids Res. 1994 Mar 25;22(6):920-8.	
	*	MERTZ et al., Single-molecule detection by two-photon-excited fluorescence. Optics Letts. 1995 Dec 15;20(24):2532-4.	
	*	METZGER, Biotech: Speed Readers. Wired. 1998 Nov;8:4.	
	*	NECHYPORUK-ZLOY et al., Single plasma membrane K+ channel detection by using dual-color quantum dot labeling. Am J Physiol Cell Physiol. 2006 Aug;291(2):C266-9. Abstract Only.	
	*	NEELY et al., A single-molecule method for the quantitation of microRNA gene expression. Nature Methods. 1996, Jan; 3(1):41-46.	
	*	NIE et al., Probing individual molecules with confocal fluorescence microscopy. Science. 1994 Nov 11;266(5187):1018-21.	
	*	NIE et al., Optical detection of single molecules. Annu Rev Biophys Biomol Struct. 1997;26:567-96.	
↓	*	PARRA et al. High resolution visual mapping of stretched DNA by fluorescent hybridization. Nat Genet. 1993 Sep;5(1):17-21.	

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FORM PTO-1449/A and B (modified PTO/SB/08) INFORMATION DISCLOSURE STATEMENT BY APPLICANT				APPLICATION NO.: 10/773,084	ATTY. DOCKET NO.: C0989.70049US01
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Sheet	3	of	3		

EW	*	PECK et al., Single-molecule fluorescence detection: autocorrelation criterion and experimental realization with phycoerythrin. Proc Natl Acad Sci U S A. 1989 Jun;86(11):4087-91.	
	*	POOT et al., Chapter 19: Cell cycle analysis using continuous bromodeoxyuridine labeling and Hoechst 33258-ethidium bromide bivariate flow cytometry. Methods Cell Biol. 1990;33:185-98..	
	*	RAMPINO et al., Apparatus for gel electrophoresis with continuous monitoring of individual DNA molecules by video epifluorescence microscopy. Anal Biochem. 1991 May 1;194(2):278-83.	
	*	RANDALL et al., Accurate and sensitive direct mRNA quantification from total RNA samples by single molecule counting. Biotechniques Live Meeting. The World Trade Center, Boston, MA. March 5, 2003. Poster and Abstract.	
	*	REN et al., Analysis of human telomerase activity and function by two color single molecule coincidence fluorescence spectroscopy. J Am Chem Soc. 2006 Apr 19;128(15):4992-5000. Abstract Only.	
	*	SCHWILLE et al. Dual-color fluorescence cross-correlation spectroscopy for multicomponent diffusional analysis in solution. Biophys J. 1997 Apr;72(4):1878-86.	
	*	STREZOSKA et al., DNA sequencing by hybridization: 100 bases read by a non-gel-based method. Proc Natl Acad Sci U S A. 1991 Nov 15;88(22):10089-93.	
	*	STRYER et al., Fluorescence energy transfer as a spectroscopic ruler. Annu Rev Biochem. 1978;47:819-46.	
	*	THOMANN et al., Automatic fluorescent tag detection in 3D with super-resolution: application to the analysis of chromosome movement. J. of Microscopy. 2002 Oct 1; 208(1):49-64.	
	*	TOBE et al., Single-well genotyping of diallelic sequence variations by a two-color ELISA-based oligonucleotide ligation assay. Nucleic Acids Res. 1996 Oct 1;24(19):3728-32.	
	*	UCHIYAMA et al., Detection of undegraded oligonucleotides <i>in Vivo</i> by fluorescence resonance energy transfer. J. of Biol. Chemistry. 1996 Jan 5; 271(1):380-4.	
	*	VAN GIJLSWIJK et al., Universal Linkage System: versatile nucleic acid labeling technique. Expert Rev Mol Diagn. 2001 May;1(1):81-91.	
	*	WANG et al., Rapid sizing of short tandem repeat alleles using capillary array electrophoresis and energy-transfer fluorescent primers. Anal. Chem. 1995; 67:1197-1203.	
✓	*	WANG et al., Fluorescence resonance energy transfer between donor-acceptor pair on two oligonucleotides hybridized adjacently to DNA template. Biopolymers. 2003;72(6):401-12.	

*a copy of this reference is not provided as it was previously cited by or submitted to the office in a prior application, Serial No. 11/448,264, filed May 28, 2003, and relied upon for an earlier filing date under 35 U.S.C. 120 (continuation, continuation-in-part, and divisional applications).

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